

Improving Healthy Eating Through Social Marketing

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Latoya Simmons] Welcome to this edition of *PCD* Sound Bites. I'm your host, Latoya Simmons. With rising obesity rates among Americans, researchers have begun looking at ways to address this public health concern by observing diet and shopping habits. Reaching out to shoppers at grocery stores can help them make healthier food purchases. Today, I'm speaking by phone with one of the winners of *PCD*'s 2017 Student Research Paper Contest, Emily Liu, a freshman at the University of Pennsylvania. Her winning research examines the link between healthy, diet-based social marketing programs in grocery stores and the frequency of fruit and vegetable consumption. In this interview, we'll discuss the results of Emily's study and what impact her research has on obesity prevention and public health. Thank you for joining me, Emily.

[Emily Liu] Thank you for having me. I'm excited to be here.

[Latoya Simmons] Your study explored the impact of a social marketing intervention to increase the purchase of fruits and vegetables among Appalachia residents. Tell listeners why this geographical area was chosen and the purpose of the study.

[Emily Liu] Sure, well, the Appalachian and deep South regions of America have some of the highest levels of health disparities in the country. In the Kentucky counties we conducted surveys in, the population of adults with obesity was greater than 40 percent—40 percent. There are also strong studies that have shown residents in these areas have a 33 percent higher chance of getting diabetes than those who live elsewhere. These concerning health disparities have started a lot of studies in the region. In this paper, we come from a nutrition and food environment approach, and we primarily looked at fruit and vegetable consumption. The purpose was to see how various grocery store interventions affect residents' shopping and consumption habits, and then hopefully be able to eventually take that data and utilize it by implementing a variety of community programs to promote healthy eating.

[Latoya Simmons] What kind of changes were made in the stores to promote healthy eating?

[Emily Liu] Some of the store interventions included offering samples and recipe cards, moving merchandise around to promote the foods being sampled, displaying fruits and vegetables at the front of the store, offering a discount on the fruits and vegetables, and promoting the campaign to store patrons. They also moved generally unhealthy foods from the front of the store, such as moving high-calorie foods, sugar-sweetened beverages, and other items, like chips, to a side aisle.

[Latoya Simmons] Did you face any barriers trying to get stores to participate?

[Emily Liu] No, they were generally willing to cooperate. Of the 30 stores contacted, 17 agreed to hold the campaigns, and we campaigned in the spring and fall of last year. The store managers also received \$100 to offset any costs they might have incurred from these interventions.

[Latoya Simmons] What was the general reaction among shoppers who participated in your study?

[Emily Liu] Shoppers who participated were generally very nice and fairly interested in these interventions going on in their community. Those who chose to sample a recipe also received a gel pack or tote bag. We managed to survey a total of 240 residents in the five counties, so I'm very grateful to everyone.

[Latoya Simmons] After implementation of the program and looking at the analysis, what did you find?

[Emily Liu] We found that, of all the interventions, recipe cards, specifically, resulted in some notably significant findings. For example, 49 percent of participants reported that the recipe cards influenced them to purchase ingredients from the recipe. And 39 percent indicated that recipe cards influenced purchasing of fruits and vegetables in general. When looking at the deeper analysis with the relationship between influence of recipe cards and frequency of fruit and vegetable consumption, there was a statistically significant trend. For example, participants who reported that the recipe card influenced fruit and vegetable purchases in general, were 11 times as likely to consume fruits two to three times a week, compared to those who reported the recipe cards did not influence their fruit and vegetable purchases. In other words, survey respondents who were more influenced by the recipe cards were more likely to eat fruits and vegetables more often.

[Latoya Simmons] You're just beginning your journey into public health. What advice would you give other high school and college students interested in improving the health of their community?

[Emily Liu] I think the best advice is don't be afraid to stray from your plans or to pursue something new. I always knew I was interested in studying the disparities in the Appalachia Kentucky region, but I really had no idea that it would manifest itself in a nutritional and diet-based approach. Now it's been two years, and each new project is still exciting and interesting. And of course, find a great mentor. Dr. Gustafson has been a real role model and mentor to me, both supporting and challenging me. She's given me so many amazing opportunities along the way, and I'm very grateful.

[Latoya Simmons] Thank you, Emily. You can read Emily's study online at cdc.gov/pcd.

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